

ABSTRACT

A disposable absorbent article includes a topsheet, a backsheet and an absorbent core disposed therebetween. One or more of the backsheet, topsheet, and absorbent core is constructed of an absorbent composite that includes an absorbent layer of hydratable fine fibers in the form of microfibril obtained from cellulose or a derivative thereof and super absorbent polymer (SAP) particles bonded together by the hydratable fibers, and a nonwoven substrate supporting the absorbent layer such as SMS. The absorbent layer is coated over the surface of the nonwoven substrate. The core may include one uniform layer of the absorbent composite or a composite having one layer of the nonwoven substrate and a plurality of segmented absorbent layers applied thereon. In the latter design, the absorbent layers are spaced apart from one another to expose surface sections of the substrate. These non-coated surface sections provide wicking zones which allow room for the absorbent layers to expand and prevent gel blocking.